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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,891	03/30/2004	Satoshi Kitamura	SIC-04-007	2890

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EXAMINER

LUM VANNUCCI, LEE SIN YEE

ART UNIT	PAPER NUMBER
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3611

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,891

Applicant(s)

KITAMURA, SATOSHI

Examiner

Lee Lum

Art Unit

3611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 11, 12 and 17-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 7, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikuma et al 5664636.

Ikuma discloses a bicycle power supply apparatus comprising

Batteries 39,

Bicycle-condition detector 51 detecting a stopped/selected condition that ordinarily does not require current from the battery, as disclosed in c11, under "Stop Discrimination Control",

This condition occurring in a predetermined time interval, as provided in c11, ln 25-28; "given time period T-sub-0",

Current-drawing unit/controller 48 that causes current to be drawn from the battery when in the stopped/selected condition (i.e., controller itself draws current while in this condition), until the voltage sensor (as implied in voltage subroutines 63-66; c12, ln 38-43) detects a predetermined voltage, in c12, last paragraph, to c13, ln 3,

Display (unidentified LED, c13, ln 2-3),

Motor driver 44 (c6, ln 60-64),

Current-flowing devices (inherently containing resistance), such as current sensor 63, and unidentified voltage sensor in c12, ln 39, coupled to the first terminal of the battery.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. **Claims 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikuma in view of Dougherty et al 6452361.

Ikuma does not disclose the battery as recharged by either an alternator, or another battery, while Dougherty shows both configurations with

Alternator 21 charging the battery 14, in c5, ln 32-36, or

Auxiliary battery 20 charging the battery 14, in c4, ln 3-6,

Where both sources are mounted on the vehicle.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to include either/both arrangements, as shown in Dougherty, to extend travel time over the life of the fully-charged batteries, thus increase safety and comfort.

B. **Claims 15 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikuma in view of Ligman 6588528.

Re **Claim 15**, Ikuma does not disclose the resistance as including a resistance coupled between a second terminal of the battery and ground, while Ligman shows this configuration in fig 2 with

Resistor 136 between second battery terminal 134, and ground.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this configuration, as shown in Ligman, to properly control the charging of the batteries, thus increase performance of the power apparatus, and safety. This circuit arrangement is extremely well-known for these objectives.

Re **Claim 16**, Ikuma does not disclose a switch coupled to the first battery terminal, while Ligman shows in fig 2,

Switch 102 coupled to a first terminal of battery 22.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this component, as shown in Ligman, to control current draw from the battery, thus increasing performance of the electrical system/mechanism, and battery life, as well-known.

3. **Claims 11, 12 and 17-20** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art does not disclose the apparatus described above further including, *inter alia*, an input switch coupled to the battery, controlled by the controller.

4. The prior art considered pertinent to the disclosure, but not relied upon, include(s):
Uno 6573686, Carney Jr 6260649, Hayashi et al 6247548, Schless 6039137, Saito et al 5878831, Matsumoto et al 5857537, Soda et al 5806621, Okamoto et al 5798702, McDermott et al 6545445.

5. Communication with the Examiner/USPTO

Any inquiry concerning this communication, or others, should be directed to Ms. Lum at 571 272-6649, M-F, 9-5. If she cannot be reached, her supervisor, Ms. Lesley Morris, may be reached at 571 272-6651. Our central fax number is 703 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. For unpublished applications - private PAIR only. For published applications - private or public PAIR. For more information re PAIR - <http://pair-direct.uspto.gov>. Questions re private PAIR - contact the Electronic Business Center (EBC) at 866 217-9197.

Ms. Lee S. Lum-Vannucci, Examiner
7/6/05

